



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,647	04/16/2004	John Kossett	R344.118.101	2286

25281 7590 06/30/2005

DICKE, BILLIG & CZAJA, P.L.L.C.
FIFTH STREET TOWERS
100 SOUTH FIFTH STREET, SUITE 2250
MINNEAPOLIS, MN 55402

EXAMINER

RODRIGUEZ, SAUL

ART UNIT	PAPER NUMBER
----------	--------------

3681

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/826,647

Applicant(s)

KOSSETT, JOHN

Examiner

Saúl J. Rodríguez

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/16/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

This is a first office action on the merits of patent application S. N. 10/826,647.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Concerning claims 1 and 11, the subsequent recitations of "the hub" create a confusion as to whether it refers to the hub of the drive shaft or the output hub.

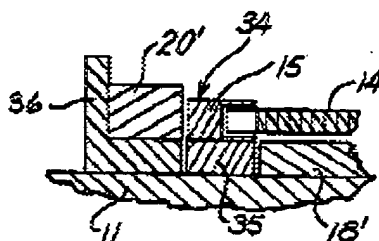
Concerning claim 2 and 3, lines 1-2, the recitation of "a hub" constitutes a double inclusion.

Claim Rejections - 35 USC § 103

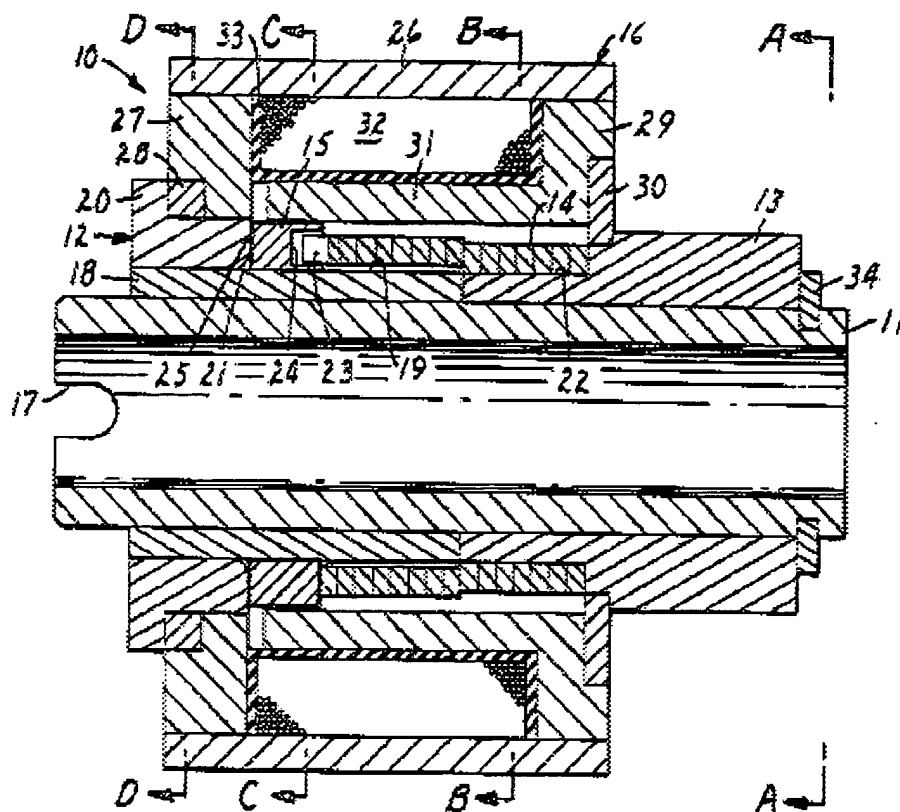
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-20, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wahlstedt ('995) in view of Kosset ('899).



Wahlstedt discloses a wrap spring clutch (Figs. 1 and 4) comprising a drive shaft (17), a shoulder (20, 20' 36), a hub (18), an output hub (13), an axially flexible wrap spring (14) with first and second ends, an axially moving (Col. 3, lines 22-27) bushing and control ring (15, 35), a wrap spring surface, a bushing surface, a tube (31), a case (26), a coil (32), and a gap (Figs. 1, 3, and 4). Although Wahlstedt discloses at least one end of the wrap spring with a press-fit connection, it does not teach a press-fitting groove for holding the ends of the wrap spring.



It has been known, however, to use such a connection for holding springs in place. For example, Kosset discloses a wrap spring clutch (Fig. 2) comprising a drive shaft (12), a shoulder (14), a hub, an output hub (16), a flexible wrap spring (32), a bushing surface and control ring (28), a wrap spring surface, a bushing surface, a tube, a case, a coil (48), and a gap. Also, Kosset discloses the conventional claimed connection (Col. 2, lines 20-26) with a groove.

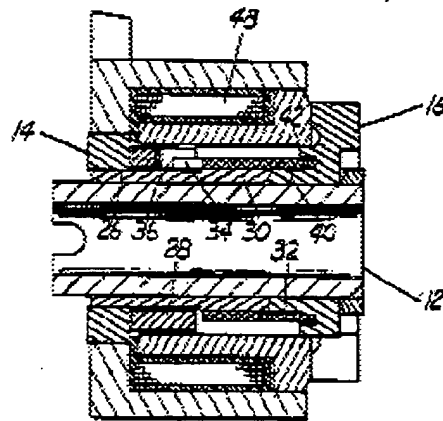


FIG. 2

Then, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the wrap spring connection of Kosset in for holding the ends of the clutch spring of Wahlstedt so that the coil is securely and permanently bound to the annulus.

Conclusion

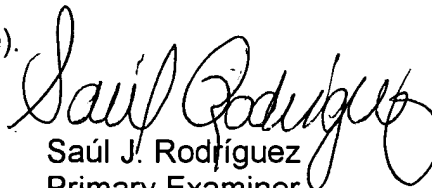
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Koyama ('171, '578), Spechko ('974), Lamououreux ('735), Arai ('822), Arcaro ('716), Leone et al. ('274), and Wussow ('808) disclose other wrap spring clutches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saúl J. Rodríguez whose telephone number is (571) 272-7097. The examiner can normally be reached on M-F 9:30-6:00.

Art Unit: 3681

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Saúl J. Rodríguez
Primary Examiner
Art Unit 3681


SJR